

**Amendments to the Claims:**

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A method for the conversion of a coal-containing feedstock to a gas product comprising methane, comprising contacting said coal feedstock with a treatment gas comprising at least about 40 weight percent  $H_2$  at a reaction temperature of at least about  $600^{\circ}C$  for a time sufficient to convert at least about 90 percent of the volatile matter in the coal-containing feedstock to methane and form a purified carbon product wherein said treatment gas is formed by contacting a molten metal comprising iron with steam to form iron oxide.
2. (Original) A method as recited in Claim 1, wherein said coal feedstock comprises low-grade coal having a sulfur content of at least about 2 weight percent.
3. (Previously Presented) A method as recited in Claim 1, wherein said treatment gas comprises at least about 99 weight percent  $H_2$ .
4. (Previously Cancelled)
5. (Previously Presented) A method as recited in Claim 1, wherein said treatment gas comprises  $H_2$  and  $CO$ .
6. (Previously Cancelled)
7. (Original) A method as recited in Claim 1, wherein said reaction temperature is from about  $700^{\circ}C$  to about  $900^{\circ}C$ .
8. (Original) A method as recited in Claim 1, further comprising the step of combusting at least a portion of said methane to generate electricity.
9. (Original) A method as recited in Claim 1, further comprising the step of combusting at least a portion of said methane in a combined cycle generator to generate electricity.
10. (Original) A method as recited in Claim 1, further comprising the step of reacting said purified carbon product and at least a portion of said methane in a boiler to generate electricity.

11. (Original) A method as recited in Claim 1, further comprising the step of diverting at least a portion of said treatment gas and combining said portion with said methane.

12-14. (Previously Cancelled)

15. (Cancelled Herein)

16-23. (Previously Cancelled)

24. (Previously Presented) A method as recited in Claim 1, wherein said step of contacting with steam is terminated and the iron oxide is reduced to iron.